

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for processing transport stream data, the system comprising:

a framer module having

an input node to receive the transport stream data,

a data output node to provide a framer data which is a representation of the transport stream data, and

a data enable output node to provide a signal to indicate a valid data on the data output node; and

a first parser module having

a data input node coupled to the data output of the framer module to receive the framer data,

a data enable input node coupled to data the data enable output node of the framer module[[:]],

a data output node to provide a first parser data when the framer data is a first data type, wherein the first parser data is a representation of the framer data,

a first data enable output node to provide a signal to indicate a valid first parser data on the data output node of the first parser, and

a second data enable output node to provide a signal to indicate the framer data is of a second data type.

2. (Currently Amended) The system of claim 1 further comprising:

a second parser module having

a data input node coupled to the data output node of the framer module to receive the framer data,

an enable input node coupled to the second data enable output node of the first parser module,

a data output node to provide a second parser data when the signal associated with the second data enable output node indicates the framer data is of a second data type, wherein the second parser data is a representation of the framer data[[:]], and
a data enable output node to provide a signal to indicate a valid second parser data on the data output node .

3. (Currently Amended) The system of claim 2 further comprising:

a first memory controller coupleable to a first memory having

a first input node coupled to the data output node of the first parser module to receive the first parser data,

and a second input node coupled to the first data enable output node of the first parser module; and

a second memory controller coupleable to a second memory having

a first input node coupled to the data output node of the second parser module to receive the second parser data,

and a second input node coupled to the data enable output node of the second parser module.

4. (Currently Amended) The system of claim 3, ~~where~~ wherein the first memory is a system memory, and the second memory is a video memory.

5. (Original) The system of claim 4, wherein the first parser module further includes an index output node to indicate a predefined data type, the index output node coupled to the first memory to identify a specific location within the system memory.

6. (Original) The system of claim 2, wherein the second parser module is a hardware parser.

7. (Original) The system of claim 6, wherein the second parser module has a modular layout that is substantially mutually exclusive of a modular layout of the first parser module.

8. (Original) The system of claim 6, wherein the second data type is video data.

9. (Original) The system of claim 1, wherein the data output node includes a plurality of nodes.

10. (Original) The system of claim 9, wherein the data plurality of nodes includes eight or more nodes.

11. (Original) The system of claim 1 further comprising:

a storage location to store a register set, the storage location having a first input node coupled to a status output node of the first parser module to receive status information, and a second input node coupled to a status output node of the second parser module to receive status information.

12. (Currently Amended) The system of claim ~~[[1]]~~11, wherein the first input node of the storage location and the second input node of the storage location are a common input node.

13. (Currently Amended) A system for processing transport stream data, the system comprising:

a framer having a modular layout, the framer comprising
an input node to receive the transport stream data,
a data output node to provide a framer data based upon the transport stream data,
and
a data enable output node to provide a signal to indicate a valid data on the data output node; and

a first parser having a modular layout separate from the modular layout of the framer, the first parser comprising:

a data input node coupled to the data output node of the framer to receive the framer data,
a first data enable output node to provide a signal to indicate a first type of framer data, and
a second data enable output node to provide a signal to indicate a second type of framer data.

14. (Currently Amended) The system of claim 13 further comprising:

a second parser having
a data input node coupled to the data output node of the framer to receive the framer data,

an enable input node coupled to the second data enable output node of the first parser, and
a data enable output node to provide a signal to indicate the second type of framer data is to be stored.

15. (Currently Amended) The system of claim 14 further comprising:

a memory controller having

a data input node coupled to the data output node of the framer to receive the framer data [[of]],

a first enable input node coupled to the data enable output node of the framer,
a second enable input coupled to the first data enable output node of the first parser,

a third enable input coupled to the data enable output node of the second parser,
and

a data output to provide data to a memory.

16. (Previously Presented) A method of parsing a data packet, the method comprising:

providing a start indicator to a first parser, the start indicator indicating a first data block of the data packet, the data packet having a predetermined number of data blocks;

analyzing at the first parser at least a portion of the first N data blocks after the start of the data packet to determine a data type of a subsequent data block of the data packet, wherein the subsequent data block is after the first N data blocks;

enabling a second parser to receive the subsequent data block when the data type of the subsequent data block is a first data type; and

enabling a third parser to receive the subsequent data block when the data type of the subsequent data block is a second data type.

17. (Original) The method of claim 16 wherein the first parser is a hardware parser.

18. (Original) The method of claim 17, wherein the second parser is a hardware parser.

19. (Original) The method of claim 18, wherein the first and second hardware parsers are modular and substantially physically separate from each other.

20. (Currently Amended) The method of claim ~~[[14]]~~16, wherein a data block is a byte of data.
21. (Original) The method of claim 20, wherein the predetermined number of data blocks is 188.
22. (Currently Amended) A system for storing packetized data, the system comprising:
an input to receive a transmitted data packet;
a first parser to analyze a header of the data packet before a second byte of a payload header is received, ~~wherein the first parser further analyzes the header of the data packet before a second byte of payload header is received~~; and
a second parser physically separate from the first parser to analyze the payload header.
23. (Cancelled)
24. (Previously Presented) The system of claim 22, wherein the second parser further analyzes the payload header before a second byte of payload data is received.
25. (Withdrawn-Allowed) The system of claim 22 further comprising:
a memory controller to store a first portion of payload data in video memory before storing a second portion of payload data in video memory, wherein the first portion of payload data immediately follows the payload header, and the second portion of payload data immediately follows the second portion of payload data.
26. (Withdrawn-Allowed) The system of claim 25, wherein the memory controller stores the first and second portion of payload data based upon the payload header.
27. (Cancelled)
28. (Cancelled)
29. (Cancelled)
30. (Cancelled)
31. (Cancelled)
32. (Cancelled)

33. (Previously Presented) A method of for processing transport stream data, the method comprising:
- receiving a transport packet having a header and a payload, wherein the payload is associated with a primary elementary stream (PES) which can be associated with video or non-video data, wherein non-video data includes video data that is not being used;
 - determining if the PES is a program clock reference (PCR) PES, wherein a PCR PES is a PES that is predefined to carry a program clock reference (PCR) currently used by a decoding system; and
 - parsing a first set of data in the header of the transport packet using a hardware adaptation field parser when the PES is a non-video PCR PES; and parsing a second set of data in the header of the transport packet using a hardware adaptation field parser when the PES is a video PCR PES, wherein the second set includes more elements than the first set.
34. (Previously Presented) The method of claim 33, further comprising:
- storing at least a portion of the PCR PES in a system memory location when the PCR PES is a non-video PES; and
 - storing at least a portion of the PCR PES in a video memory location when the PCR PES is a video PES.
35. (Cancelled)